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i2 SUMMIT

COMPARISON OF CLINICAL OUTCOMES BETWEEN ZOTAROLIMUS- AND SIROLIMUS- ELUTING STENTS IN PATIENTS WITH ST-SEGMENT ELEVATION ACUTE MYOCARDIAL INFARCTION

i2 Poster Contributions
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Authors: *Hyun Kuk Kim, Myung Ho Jeong, Youngkeun Ahn, Jong Hyun Kim, Shung Chull Chae, Young Jo Kim, Seung Ho Hur, In Whan Seong, Taek Jong Hong, Dong Hoon Choi, Myeong Chan Cho, Chong Jin Kim, Ki Bae Seung, Yang Soo Jang, Seung Woon Rha, Jang Ho Bae, Jeong Gwan Cho, Seung Jung Park, The Heart Center of Chonnam National University Hospital, Gwangju, South Korea*

Background: Zotarolimus-eluting stents (ZES) showed higher in-segment late luminal loss and in-segment binary restenosis rate compared with sirolimus eluting stents (SES) in several studies. However, no data are available on direct comparison of the clinical outcomes between two stents in unselected patients with ST-segment elevation acute myocardial infarction. The aim of this study is to compare the clinical outcomes of ZES and SES in real-world patients with ST-segment elevation acute myocardial infarction (STEMI).

Methods: 873 patients with STEMI (306 patients in ZES group, 567 patients in SES group) were enrolled in a nationwide prospective Korea Acute Myocardial Infarction Registry (KAMIR) between Jan 2007 and Jan 2008. Primary end points were major adverse cardiac events (MACE), a composite of all cause of death, myocardial infarction, target lesion revascularization during 12-month clinical follow-up.

Results: During one-year follow up, the primary end points occurred in 140 patients (16.0%). Use of glycoprotein IIb/IIIa inhibitor and multi-vessel disease were more common in the SES group. No significant differences were existed in baseline, angiographic, and procedural characteristics except these findings. SES group, however, had significantly lower incidences of MACE [Hazard ratio (HR) 1.52, 95% confidence interval (CI) 1.07-2.16, p=0.02], target lesion revascularization (HR 2.16, 95% CI 1.01-4.59, p=0.046) and target vessel revascularization (HR 2.24, 95% CI 1.18-4.24, p=0.013), but not death or MI (HR 1.37, 95% CI 0.91-2.05, p=0.129), which were adjusted with propensity score and outcome variables (p<0.2 in univariate analysis).Stent thrombosis (definite/probable) was occurred 1.0% in ZES, 1.8% in SES group, and there was no significant differences (p=0.302).

Conclusions: SES provided superior angiographic outcomes which were translated into better clinical outcomes without safety profile differences in patients with STEMI compared with ZES.